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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,364

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EXAMINER

LOWE, MICHAEL S

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/809,364	Applicant(s) EGAWA, KIYOAKI	
	Examiner Michael Scott Lowe	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claims 1-5,8-17 objected to because of the following informalities: Claims 1,16,17 seem to have a number agreement issue between “parts” and “opens” in the second to last line. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,11-17, are rejected under 35 U.S.C. 103(a) as obvious over Takeshi (2002-025167) in view of Yosheida (US 4,655,662).

Re claim 1,16,17, Takeshi teaches an apparatus for transporting a storage medium (generally 9) from a holder (generally 20) to a storage device (generally D), said apparatus comprising:

a base (generally 4);

a carriage (generally 30,5) driven by first driving force, said carriage being movable relative to said base (generally 4) between said holder (generally 20) and said storage device (generally D);

a picker (31,34,etc.) provided on said carriage (generally 30) and driven by second driving force, said picker selectively loading and unloading said storage medium (generally 9);

a first driving device (generally 52,etc.) generating said first driving force;

a second driving device (generally 51A,etc.) provided on said base and generating said second driving force; and

a transmission mechanism (generally 51A,51a,etc.) transmitting said second driving force from said second driving device to said picker allowing movement of said carriage; wherein said picker has a gripper (generally 34,39) which includes first and second parts (various, 34,39) which are linked to each other rotatably (generally 33,38 rotates and is the center part of the link between 34-34, 39-39) around an axis (generally the rotation axis of 33,38 or any other rotary connection axis therebetween);

wherein said carriage has cams or some mechanism which makes said gripper open or close in response to the movement of said picker (gripper opens and closes to grab and release the storage medium 9 only at the location of the medium, since the gripper only gets to that spot by movement of the picker and its associated cams/mechanism 33,38,etc., then it is taught that the gripper opens and closes in response to the picker's movement and the cams/ mechanism associated with that movement).

Takeshi does not explicitly state that cams open and close but already teaches conversion of rotary to linear movement elsewhere (such as the vertical movement and picker movement) which is the essence of what cams are. Yoshieda teaches a carriage having cams (generally 43,38) and a picker (generally 15) with a gripper (generally 17)

which includes first and second parts which are linked to each other rotatably around an axis, wherein the gripper opens and closes in response to movement of the picker (generally 15) in order to reduce weight and power consumption (as opposed to a power actuated gripper). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have tried modifying Takeshi by the general teaching of Yosheida to have the carriage cams and a picker with a gripper which includes first and second parts which are linked to each other rotatably, wherein the gripper opens and closes in response to movement of the picker in order to achieve the predictable result of reducing weight and power consumption and to have gripping mechanism similar in style to power transmission mechanisms of the rest of the device. Thus as modified Takeshi teaches said first parts move pivotally about said axis and open for hooking notches of the storage medium by said cams.

Re claim 2, Takeshi teaches said transmission mechanism comprises a rotary shaft (51A,etc.) and a coupling device (51a,51b,etc.), and said coupling device is provided on said carriage and transmits torque from said rotary shaft to said picker allowing relative movement between said rotary shaft and said picker along a longitudinal axis of said rotary shaft.

Re claim 3, Takeshi teaches said rotary shaft (51A,etc.) has a convex portion in cross section, said coupling device (51a,51b,etc.) has a concave portion in cross section, and said convex portion of said rotary shaft fits said concave portion of said coupling device.

Re claim 11, Takeshi teaches said picker comprises a gripper assembly (31,34,etc.) grasping said storage medium 9.

Re claim 12, Takeshi teaches said picker comprises a support structure (31,32,etc.) translating said gripper assembly in a direction toward and away from said holder.

Re claim 13, Takeshi teaches said gripper assembly comprises an arm 34 and a guide 33 guiding said arm, said arm selectively assumes an open position and a closed position, said guide 33 has a curved portion such that said arm moves from said closed position to said open position as said arm approaches said holder and said arm moves from said open position to said closed position as said arm retreats from said holder.

Re claim 14, Takeshi teaches said holder is a library.

Re claim 15, Takeshi teaches said storage medium is housed in a cartridge (generally 9).

Claims 4,5,8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi (2002-025167) in view of Yosheida (US 4,655,662) and Ono (JP 03-147564).

Re claims 4,5, Takeshi is silent regarding the rotary shaft having a polygonal/rectangular shape in cross section. Ono teaches that it is known to have the rotary shaft (generally 30,40) having a polygonal/rectangular shape in cross section. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have tried modifying Takeshi by the general teaching of Ono to have the rotary shaft having a polygonal/rectangular shape in cross section as an equivalent alternative

in order to achieve the predictable result of making it easier to grip with a wrench and less likely to have undesired slippage in its couplings.

Re claim 8, Takeshi is teaches the transmission mechanism comprising a gear but is silent regarding a belt. Ono teaches that it is known to have the transmission mechanism (figures 1,3) comprising a gear and (elastic) belt. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have tried modifying Takeshi by the general teaching of Ono to have the transmission mechanism a gear and belt in order to achieve the predictable result of saving weight relative use of all gear or gear and screw assemblies.

Re claim 9, Takeshi as already modified by Ono teaches said belt being elastic.

Re claim 10, Takeshi as already modified by Ono teaches said belt comprising a spring (the elastic belt itself can be considered a spring and also there are springs 38,44,etc. with the belts.)

Conclusion

Applicant's arguments filed 5/5/08 have been fully considered but they are not persuasive.

The drawing objections were dropped and in view of applicant's amendments and arguments the 102 rejections were dropped. However, the obvious rejections remain. Applicant argued that the newly added limitations overcome the prior art. However, as noted above the claims as currently written are still broad enough to read on the noted references.

Applicant argued that claim 1 states “said first parts comprises hook shape” which is not actually in the claim. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the hook shape) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argued that Takeshi's hooks are rigid which is also not a claim limitation and Takeshi states that the grippers pinch/grab the storage medium so they are not completely rigid and have a mechanism for gripping as stated in the above rejections. Applicant argued that Yoshieda pinches rather than hooks like Takeshi, however in both references there is just opening and closing to grip. The modification is using the teaching of using cams to actuate the grippers and is in line with the rotary-linear power transmissions detailed elsewhere in Takeshi. It would be well within the ability of one of ordinary skill to implement the power transmission described and there is no reason to believe the device would be unable to effectively grab the storage medium.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Scott Lowe whose telephone number is (571)272-6929. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on (571)272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Scott Lowe/
Examiner, Art Unit 3652